

refined serum containing only $\frac{1}{2}$ to 1 per cent. proteid, that is to say, one tenth to one fifth the quantity present in normal serum, but possessing an equal potency as regards coagulation. This preparation may be passed through a Berkefeld filter so as to be rendered sterile.

This euglobulin would seem to be of value for subcutaneous or intravenous use in hemorrhage, particularly on account of its small quantity of proteid.

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Comparative distribution of urea, creatinine, creatine, uric acid, and sugar in blood and spinal fluid.

By **M. S. FINE** and **V. C. MYERS.**

[From the Laboratory of Pathological Chemistry, New York Post-Graduate Medical School and Hospital.]

Comparative analyses of blood and spinal fluid were carried out in 15 cases. These patients were suffering from nephritis of various stages of severity, and gave chemical blood pictures varying from practically normal to the excessive retention of uremia. The concentration of urea in the spinal fluid averaged 88 per cent. of that in the blood; the concentration of creatinine, 46 per cent.; of creatine, 22 per cent.; and of uric acid, 5 per cent. of the respective concentrations in the blood. If these differences in concentrations may be regarded as representing the relative permeability of the cells separating the blood and spinal fluid, one notes that the extent of passage into the spinal fluid is greatest for urea, less for creatinine, still less for creatine and least for uric acid. It is of interest to note that this represents also the order of their solubility in water, and, in part, the relative ease with which these substances appear to be eliminated by the kidney.

It may be further observed that the sugar concentrations of the spinal fluid in these fifteen cases averaged 57 per cent. as much as that of the blood.